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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,613

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EXAMINER

MIRZA, ADNAN M

ART UNIT

PAPER NUMBER

2445

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/524,613	<b>Applicant(s)</b> KABASHIMA ET AL.	
	<b>Examiner</b> ADNAN M. MIRZA	<b>Art Unit</b> 2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11./03./2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12./23./2008</u>  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Bendinelli et al (U.S. 6,631,416).
3. As per claims 33,1,4-27,30 Bendinelli disclosed a network system comprising: an edge router apparatus that is disposed at a connection between a network and the outside of the network, receives a packet from the outside of the network and transfers the packet to a router apparatus within the network, or transmits a packet from a router within the network to the outside of the network (col. 13, lines 21-34 & col. 16, lines 4-9). One ordinary skill in the art at the time of the invention knows that gateway is interpreted as a router; router apparatus that receives and transfers a packet to which switching information has been affixed for switching the packet; wherein: the edge router apparatus comprises: a switching information calculation device that obtains the switching information for switching the received packet at each router apparatus positioned along a transfer path of the received packet within the network based on a destination address of the packet received from the outside of the network (col. 24, lines 43-65); and a first transmitting device that affixes to the received packet the switching information obtained by the

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switching information calculation device in a transfer path order, and transfers the received packet to which the good switching information has been affixed to a transfer destination router apparatus; and the core router apparatus comprises: a second transmitting device that switches the received packet in the core router apparatus itself based on the switching information that has been affixed to the received packet, and transmits a packet that has had the switching information used by the core router apparatus itself deleted (col. 43, lines 19-41).

4. As per claims 34,28-29 Bendinelli disclosed A network system comprising: an edge router apparatus that is disposed at a connection between a network and an another network, receives a packet from the other network and transfers the packet to a router apparatus within the network, or transmits a packet from a router apparatus within the network to the other network; and a core router apparatus that receives and transfers a packet to which switching information has been affixed for switching the packet; wherein: the edge router apparatus comprises: a routing table that stores switching information for switching the packet at each router apparatus positioned along a transfer path of the packet in the network up to the other network for each network address of the other network (col. 27, lines 45-63); a switching information calculation device that uses a destination address of the packet received from the other network, searches the routing table, and obtains the switching information for switching the received packet at each router apparatus positioned along the transfer path of the received packet within the network (col. 28, lines 36-48); and a first transmitting device that affixes to the received packet the switching information obtained by the switching information calculation device in a transfer path order, and transfers the received packet to which the switching information has been affixed to a

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transfer destination router apparatus (col. 13, lines 45-55); and the core router apparatus comprises: a second transmitting device that switches the received packet in the core router apparatus itself based on the switching information that has been affixed to the received packet, and transmits a packet that has had the switching information used by the core router apparatus itself deleted (col. 43, lines 19-41).

5. As per claim 35,<sup>31</sup> Bendinelli disclosed wherein: the edge router apparatus provides a data input apparatus for setting the switching information in the router table (col. 27, lines 45-63).

6. As per claims 36,<sup>32</sup> Bendinelli disclosed wherein: the edge router apparatus comprises: a first reporting device that reports a network address of the other network connected to the edge router apparatus itself and switching information to the other network to a core router apparatus or another edge router apparatus connected to the edge router apparatus itself as path information (col. 58, lines 27-36), and a creating device that receives the path information that has been reported from the core router apparatus or the other edge router apparatus connected to the core router apparatus itself, and creates the routing table based on the received path information (col. 57 lines 9-15) ; and the core router apparatus comprises: a second reporting device that affixes switching information for an edge router apparatus or a core router apparatus that have transmitted the path information to the received path information, and reports the path information having affixed the switching information to core router apparatuses and edge router apparatuses other than the edge router apparatus and the core router apparatus that have

transmitted the path information among core router apparatuses and edge router apparatuses that are connected to the core router apparatus itself (col. 13, lines 45-55).

### ***Response to Arguments***

7. Applicant's arguments filed 11/03/2008 have been fully considered but they are not persuasive. Response to applicant's arguments is as follows:

A. Applicant argued that prior art did not disclose, "The Switching information calculation device in the edge router apparatus of claim 33 "That obtains the switching information for switching the received packet".

As to applicant's argument Bendinelli disclosed, "The Switches 680 switch information or traffic (e.g., datagrams, packets, or cells) between one or more subsystems 611-616 of the network operations center 610. The switches 680 may be implemented with one or more processors, a router, a switch, and or any other communication device capable of switching and or routing information to the appropriate subsystems within the network operations center (col. 24, lines 44-49). During the user's first session with the public web server of the network operations center, the user may connect to the network operations center using a browser configured with the Secure Sockets Layer protocol (SSL). During this initial contact with the public web server, the network operation center may limit the user's range of permissible functions to basic functions until a secure tunnel is established (col. 25, lines 36-43). The gateways 150-153 may

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include, for example one or more of the following processors:” a computer, a server, a router, a switch, a portable device such as cell as a cell phone or personal digital assistant, any other communication device capable of performing the functions of gateway (col. 16, lines 4-9).

B. Applicant argued that prior art did not disclose, “Which stores switching information for switching a packet at each router apparatus positioned along a transfer path of the packet in a network up to another network for each network address of the other network.

As to applicant’s argument Bandinelli disclosed, “Alternatively, the disk image may be loaded onto a communication device, such as router, switch, a bridge, enabling them to participate in one or more virtual private networks established over the internet (col. 27, lines 27-30)”.

C. Applicant argued that prior art did not disclose, “The first transmitting device in the edge router apparatus of claim 33 “That affixes to the received packet the switching information obtained by the switching information calculation device in a transfer path order, and transfers the received packet to which the switching information has been affixed to a transfer destination router apparatus” but also the second transmitting device in the core router apparatus of claim 33 “ that switches the received packet in the core router apparatus itself based on the switching information that has been affixed to the received packet, and transmits a packet that has had the switching information used by the core router apparatus itself deleted”.

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As to applicant's argument Bandinelli disclosed, "The gateways 150-153 may include, for example, one or more of the following processors: a computer, a server, a router, a switch, a portable device such as cell phone or personal digital assistant, or any other communication device capable of performing the functions of gateway in accordance with the present invention (col. 16, lines 4-9)". The above statement Bandinelli clearly stated the different functionality of the gateway where gateway is also represented as a router and a switch. After initial contact with the network operations center is made, the gateway daemon may open a TCP connection to the tunnel interface module 612. With a TCP tunnel established, the network operations center 610 may provide the gateway daemon with an IP address, permitting the first gateway 650 to make an internal routing table entry. This routing table entry may permit the first gateway 650 to route, for example, traffic associated with controlling a gateway through the TCP tunnel to the network operations center 610 and the tunnel interface module 612. The first gateway may then communicate directly with the tunnel interface module 612 through the TCP tunnel (col. 28, lines 37-49).

D. Applicant argued that prior art did not disclose the edge router apparatus of claim 34 which stores switching information for switching a packet at each router positioned along a transfer path of the packet in a network up to another network for each network address of the other network.

As to applicant's argument Bandinelli disclosed, "The gateway may then execute a daemon (step 1040) that may perform the following steps: contact the network operation center 610 and/or the



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tunnel interface module 612; and initiate IPSec tunnels through the TCP tunnels to the tunnel interface module 612 (step 1060) (Col. 27, lines 53-58).

E. Applicant argued that prior art did not disclose the switching information calculation device of claim 34 “That uses a destination address of the packet received from the other network, searches the routing table and obtains the switching information for switching the received packet at each router apparatus positioned along the transfer path of the received packet within the network”.

As to applicant’s argument Bandinelli disclosed, “After initial contact with the network operations center is made, the gateway daemon may open a TCP connection to the tunnel interface module 612. With a TCP tunnel established, the network operations center 610 may provide the gateway daemon with an IP address, permitting the first gateway 650 to make an internal routing table entry. This routing table entry may permit the first gateway 650 to route, for example, traffic associated with controlling a gateway through the TCP tunnel to the network operations center 610 and the tunnel interface module 612. The first gateway may then communicate directly with the tunnel interface module 612 through the TCP tunnel (col. 28, lines 37-49)”.

F. Applicant argued that prior art did not disclose a core router apparatus that receives and transfers a packet to which the switching information has been affixed for switching the packet”

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As to applicant's argument Bandinelli disclosed, If the originating gateway is accessible a firewall (not shown) (Step 1330) and the destination gateway is not behind a firewall (step 1390), the originating gateway may open a tunnel to the destination gateway (step 1393) and proceed to exchange information with destination (step 1395) through the established tunnel (col. 38, lines 23-28).

G. Applicant argued that prior art did not disclose," transmitting a packet that has had the switching information used by the core router apparatus itself deleted'.

As to applicant's argument Bandinelli disclosed, "the network operations center periodically receives through the control path monitoring information from the first gateway 600, such as the number of active tunnels, up/down items for each tunnel, and ping time between tunnels (i.e latency). The monitoring information may be exchanged using XML files". When the control path is activated (step 1096), the first gateway 650 may notify each of the other gateways that are listed on its partner list (col. 30, lines 22-29).

***Conclusion***

**8. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Adnan Mirza whose telephone number is (571)-272-3885.

10. The examiner can normally be reached on Monday to Friday during normal business hours. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571)-272-3933. The fax for this group is (703)-746-7239. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866)-217-9197 (toll-free).

/A. M. M./  
Examiner, Art Unit 2445

/Larry D Donaghue/  
Primary Examiner, Art Unit 2454